#### UTAH OIL AND GAS CONSERVATION COMMISSION

REMARKS WELL LOG		TRIC LOGS	_FILEX	WATER SAN	DStoo	AT ON INS	PECTED	SUB-REPORT and	
			_						
<del></del>		-	_						
DATE FILFD	3-27-9	92							
LAND FEE & PATENTED	STATE LE	ASE NO			PUBLIC LEASE N	o UT	U-68631	NAIGNI	
DRILLING APPROVED	5-13-9	2 (EXCE	PTION L	OCATION)					
SPUDDED IN									
COMPLETED		PUT TO PRODU	IC 114G						
INITIAL PRODUCTION									. '
GRAVITY A PT							,		<u>_</u>
GON							Carlon	0501	
PRODUCING ZONES									
TOTAL DEPTH			1	,					
WELL ELEVATION /								***************************************	7
DATE ABANDONED	VA	01-7-9	1				···-		
FIELD	NATUR/	L BUTTES	- <del>*</del>			•			
UNIT									
COUNTY	UINTAL	I							
WELL NO	FEDERA	L #11-31C				AP	I NO. 43-0	147-32244	· · · · · · · · · · · · · · · · · · ·
LOCATION 16	57' FSL	FROM (N) IST LINE.	2889	' FWI.	FT FROM (E)	W) LINE	NE SW	1.4 1/4 SEC	31
						-			
TWP RGE	SEC	OPERATOR .			TWP	R	GE SEC	OPERATOR	
		·			<u></u>			DO C P PERCENCE	
					\ 99	201	g   31	PG & E RESOURCE	S CO.

NOTICE OF STAKING Not to be used in place of Applic 3160-3)	6. Lease Number UTU-68631						
. Oil Well Gas Well X Other (Specify) 7. If Indian, Allottee or Tribe Name							
2. Name of Operator: PG&E Resources Company	8. Unit Agreement Name						
3. Name of Specific Contact Pers Randy Miller (801)789		9. Farm or Lease Name Federal					
4. Address & Phone No. of Opera 5950 Berkshire Lane, Su: Dallas, Texas 75225	10. Well No.						
5. Surface Location of Well 1657' FSL & 2889' FWL	NE/SW	11. Field or Wildcat Name Riverbend					
Attach:  a) Sketch showing road pad dimensions, and b) Topographical or othe showing location, according to the boundaries.	12. Sec., T., R., M., or Blk and Survey or Area Sec. 31, T9S, R20E						
15. Formation Objective(s) Wasatch and Lower Green River	16. Estimated Well Depth 8100 '	13. County, Parish, or Borough Uintah	14. State Utah				
17. Additional Information (as appropriate; shall include surface owner's name, address and, if known, telephone number)							

18.	Signed_	San	Zu	hele	tine

Tale\_Drilling\_Engr. Date 2/7/92

Gary Thetstine

Note:

Upon receipt of this Notice, the Bureau of Land Management (BLM) will schedule the date of the onsite predrill inspection and notify you accordingly. The location must be staked and access road must be flagged prior to the onsite.

Operators must consider the following prior to the onsite:

a) H<sub>2</sub>S Potential

b) Cultural Resources (Archeology)

c) Federal Right of Way or Special Use Permit

l Orig. & 2 copies:

BLM/Vernal

1 copy: Div. Oil, Gas and Mining

l copy: Gary Whetstine

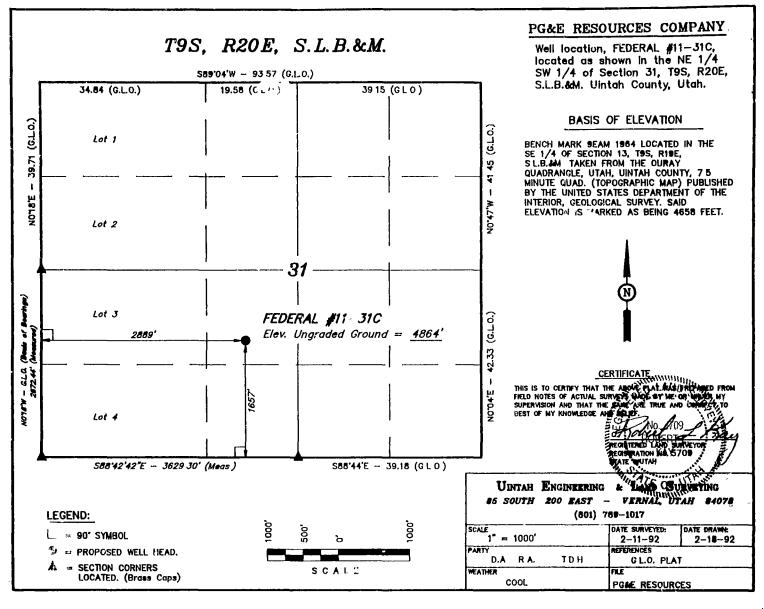
l copy: Central Files/Dallas

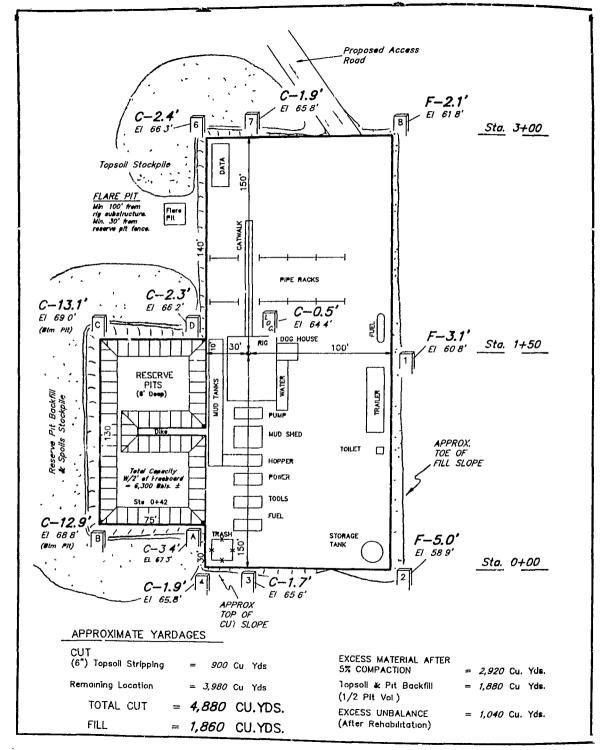
1 copy: Vernal Office

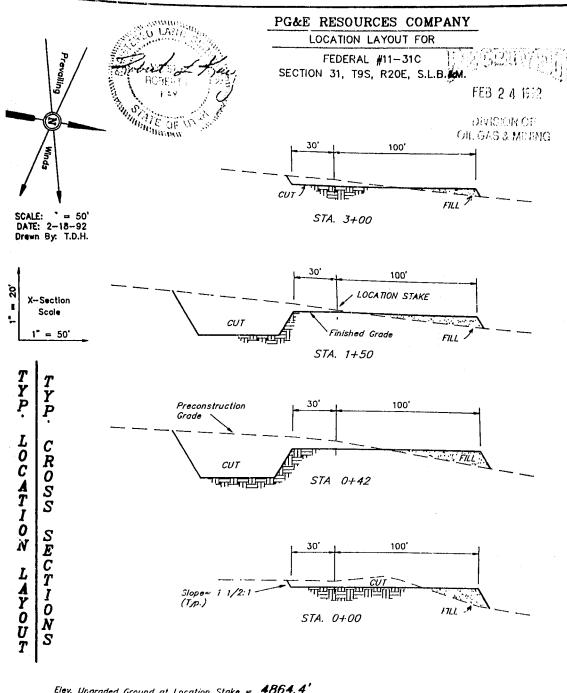
DAVISION OF OIL GAS & MILENG

FEB 2 4 1992

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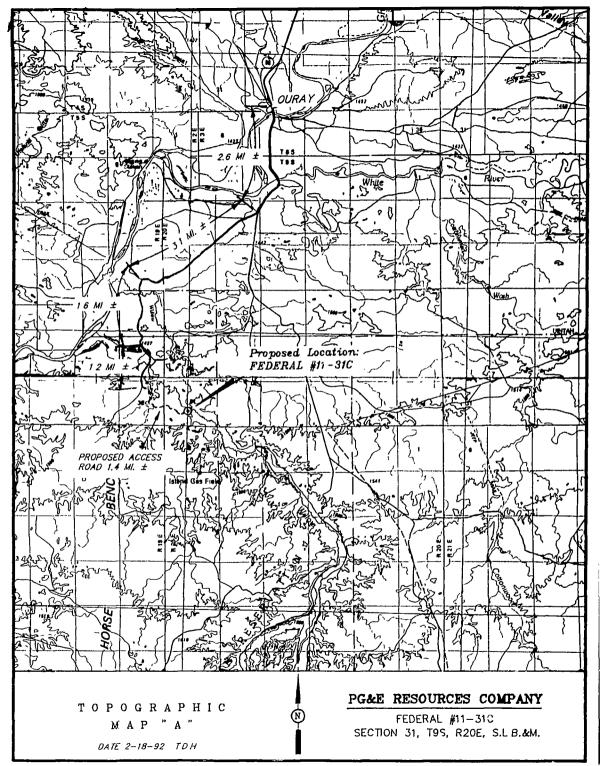


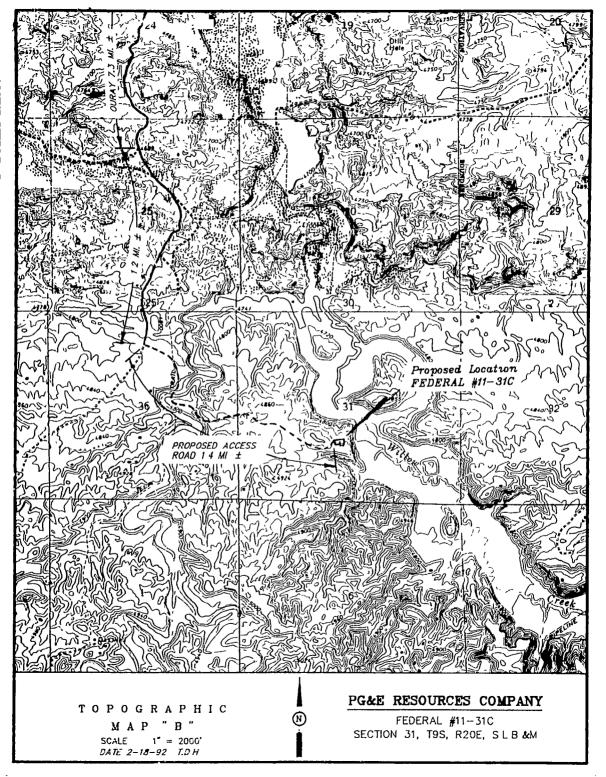


Elev. Ungraded Ground at Location Stake = 4864.4'

4863.9 Elev. Graded Ground at Location Stake

UINTAH ENGINEERING & LAND SURVEYING 85 Se. 200 Eust Vernal, trah







## DEPARTMENT OF NATURAL RESOURCES DIVISION OF WATER RIGHTS

Norman H. Bangerter Gorenor Dee C. Hansen Frecume Dresion Robert L. Morgan State Frammer

Eastern Area
Stale/County Building
152 East 100 North
Vernat Utan #407# 2110
#01 7#1 0770 x 327

March 13, 1992

Dale Price West Hazmat Trucking Corp P. O. Box 1667 Vernal, UT 84078

> RE: Temporary Change t92-43-065 Water Right No. 43-8290

Dear Mr. Price:

The above numbered Temporary Change Application has been approved subject to prior rights. The water is supplied by an underground water well owned by West Hazmat Trucking Corp..

A copy is herewith returned to you for your records and future reference.

Sincerely,

Robert W. Leake, P.E. Regional Engineer

For Robert L. Morgan, P.E.

State Engineer

RWL/bmw

Enclosure

# APPLICATION FOR TEMPOR RY CHANGE OF WATER

STA	TF	OF	UTA	Н
מוכ		UI	uin	ш

Rec. by .	
fee Paid \$ .	
Receipt # .	
Microfilmed .	
poll #	

For the purpose of obtaining permission to make a temporary change of water in the State of Utah, application is hereby made to the State Engineer, based upon the following showing of facts, submitted in accordance with the requirements of Section 73-3-3 Utah Code Annotated 1953, as amended.

WATER RIGHT NUMBER: 43 - 8290 CHANGE APPLICATION NUMBER: 192-43-06 This Change Application proposes to change the PLACE OF USE. OWNERSHIP INFORMATION. West Hazmat Trucking Corporation INTEREST: 100% ADDRESS: P.O. Box 1667, Vernal, UT 84078 FILING DATE: March 13, 1992 B. PRIORITY OF CHANGE: March 13, 1992 C. RIGHT EVIDENCED BY: A51641 DESCRIPTION OF CURRENT WATER RIGHT: 2. SOURCE INFORMATION. QUANTITY OF WATER: 0.04 cfs Underground Water Well COUNTY: Uintah B. DIRECT SOURCE: C. POINT OF DIVERSION -- UNDERGROUND: (1) N 960 feet W 130 feet from El corner, Section 9, T 85, R 20E, SLBM WELL DIAMETER: 18 inches WELL DEPTH: 54 feet

INDUSTRIAL: from Jan 1 to Dec 31. Makin Brine Drilling fluid for drilling

Oil & Gas Wells.

WATER USE INFORMATION.

MAR 2.7 ES2

ONUSION OF ONUSA & RAD JIO 4. PLACE OF USE. (Which includes all or part of the following legal subdivisions:)

BASE	TOWN	RANG	SEC	NE	NW	SW	SE		NE	NW	SW	SE		NE	NW	SW	SE	 NE	<u>NW</u>	SW	SE	
SL	88	20E	9				X									L		 L.,		Ĺ.,		
*																		 				1
*					THI	E F	OLL	DWING	a Cl	HANG	GES	ARI	E PRO	OPO:	SED	:						•

NORTH-WEST

SOURCE INFORMATION.

A. QUANTITY OF WATER: 0.04 cfs

REMAINING WATER: Same as HERETOFORE

SOUTH-WEST

SOUTH-EAST!

B. DIRECT SOURCE:

Underground Water Well

COUNTY: Duchesne

C. POINT(S) OF DIVERSION -- UNDERGROUND: Same as HERETOFORE.

INORTH-EAST!

D. COMMON DESCRIPTION: 3 miles northeast of Ouray

6. WATER USE INFORMATION. Same as HERETOFORE.

7. PLACE OF USE. Changed as Follows.

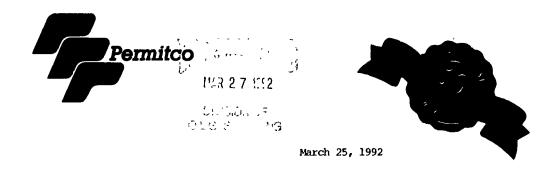
(Which includes all or part of the following legal subdivisions:)

				NOI	₹TH-	EAS	ST#		NOF	₹TH-	-WES	ST	 501	JTH-	-WES	ST}		SOL	JTH	-EAS	ST}
BASE	TOWN	RANG	SEC	NE	NW	SW	SE		NE	NW	SW	SE	 NE	NW	SW	SE		NE	NW	SW	SE
SL	98	19E	24	X	X	X	X	808	X	X	X	X	 X	X	X	X		X	X	X	X
			36	X	X	X	X		X	X	X	X	 X	X	X	. X		X	X	X	\\\\X\\\
٥L	75	ZUL	30	<u>X</u>	X	X	X		X	X	X	X	 <u> </u>	<u> X</u>	X	X	888	X	X	X	_X
			31	X	X	_X	X		X	<u> </u>	L X	X	 X	<u> </u>	<u> </u>	<u> </u>	220	<u>  X</u>	X	X	LX)

#### 8. SIGNATURE OF APPLICANT(S).

The undersigned hereby acknowledges that even though he/she/they may have been assisted in the preparation of the above-numbered application, through the courtesy of the employees of the Division of Water Rights, all responsibility for the accuracy of the information contained herein, at the time of filing, rests with the applicant(s).

Signature of Applicant(s)



Utah Division of Oil, Gas & Mining 3 Triad Center, Suite 350 Salt Lake City, UT 84180-1203

Attn: Tammi Searing

Re: PG & E Resources Company

#11-31C Federal

NE SW Sec. 31, T9S - R20E Uintah County, Utah

Dear Tammi,

Enclosed please find three copies of the Application for Permit to Drill on the above mentioned location along with copies of the drilling program, water permits and associated maps and diagrams. In addition, enclosed are copies of the Onshore Order No. 1 which were prepared for the Bureau of Land Management for use of their surface.

Please contact me at your earliest convenience if you should require additional information.

Upon approval of the enclosed application, please forward the approved copies to Permitco Inc. - Agent for PG & E Resources Company at the address shown below. I will then forward copies to PG & E for their files. Your assistance in this matter would be greatly appreciated.

Sincerely,

PERMITO INC.

Lisa L. Smith Consultant for:

PG & E Resources Company

Enc.

CC: PG & E - Dallas, TX
PG & E - Vernal, UT

Permitco Incorporated
A Petroleum Permitting Company

la Type of Work

h Type of West %, □

1. Name of Operator

7 Address of Operator

Permitco Inc

At prepayed area zone

APPLICATION FOR PERMIT TO DRILL, DEEPEN,

Other

214/750-3800

303/452-8888

I Location of Weil (Perert Jection ciencity and in accordance to a any size organization)

NE SW Sec. 31

ALE UP UTAN						
EPARTMENT	OF NATURAL	RESOURCES				

1657' FSL and 2889' FWL

DIVISION OF OIL, GAS, AND MINING

DEEPEN -

RCES (OU. Euctions)	on
NG	5 Lease Designation and Serial No.
	UTU-68631
EPEN, OR PLUG BACK	6 If '- an, Allottee or Tribe Name
PLUG BACK 🗀	i. Unit Agreement Name N/A
Sise XX Multiple Zone	3 k trm or Lerse Name
5950 Berkshire Lane, #6	
Dallas, TX 75225	9 Weil No
	#11-31C
Denver, CO 80241 🔪	Riverbend/Wasatch
sua e requiremen siff	Riverbend/Wasatch
	11 Sec. T. R. M. or Bik and Survey or Area
	Sec. 31, T9S - R20E
	12 County or Parrish 13 State

14 Distance in miles and direct on from nearest and or post off ce'

- Agent

10 miles southwest of Ouray, Utah Distance from proposeut location to mearest property or tease line, ft (Also to nearest driv line if any)

No of acres assigned o this well to of acres a case

none 15 Distance from proposed scat on'to nearest seil drilling completed or applied for, on this 'ease ft

DRILL KX

(A.S. XX

PG & E Resources Company

40 1340 05 20 Retary or cable tools Promoved septim

none

81001 Rotary

21. Elevations (Show whether Dr. RT GR etc.)

Approx date work will stirt\* Immediately upon approval of this

of interest.

4864' GR

application. Size of Hut-We was per Took Ser -e Depth Size of Casing 4001 170 sx or suffic to circ to surf. 12-1/4" 9-5/8" 36# 17# 8100 600 sx or suffic to cover zones 7-7/8" 5-1/2"

PG & E Resources Company proposes to drill a well to 8100' to test the Wasatch formation.

PROPOSED CASING AND CENENTING PROGRAM

If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of Utah requirements.

See Onshore Order No 1 attached.

Bond coverage for this well is provided under Bond No 8063-38-07 land 8057-26-00.

Approved water permit is attached.

143 2 7 1°C2

DISTOROR OF OF CASE MONG

IN ABOVE SPACE DESCRIBE PROFOSED PROGRAM. If proposal a o deepen or plug back give data on present productive zone and proposed new pro-

Sirned State SMILL	Consultant for PG & E Resources Company Tree-	3/25/92
(This space for Sederal or State office use)	APPROVI	

Approved by ...... Conditions of approval if any

APPROV Arnestal Date

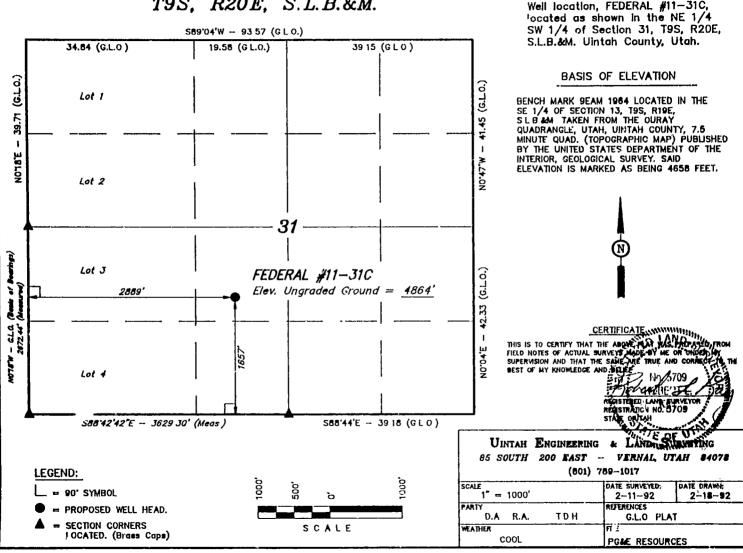
OF UTA

43 047- 300044

OIL, GAS DATE: \_

\*See Instructions On Reverse SideELL SPACING

## T9S. R20E. S.L.B.&M.



PG&E RESOURCES COMPANY

#### CONFIDENTIAL - TIGHT HOLE

#### ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Chshore Federal and Indian Oil & Gas Leases

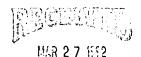
> #11-31C 1657' FSL and 2889' FWL NE SW Sec. 31, T9S - R20E Uintah County, Utah

> > Prepared For:

P G & E RESOURCES COMPANY

By:

PERMITCO INC. 13585 Jackson Drive Denver, Colorado 80241 303/452-8888



DIVISION OF OIL GAS & MINING

#### Copies Sent To:

3 - BIM - Vernal, Utah

1 - Utah Division of Oil, Gas & Mining - SIC, UT

3 - PG & E Resources - Dallas, TX

1 - PG & E Resources - Vernal, Utah



5950 Berkshire Lane Suite 600 Dallas Texas 75225 Telephone 214/750-3800 FAX 214/750 3883

1200 Travis Street **Suite 1960** Houston Texas 77002 Telephone 713/658-0601 FAX 713/658-0762

March 2, 1992



Bureau of Land Management

RE: 11-24B NESW Sec. 24-T9S-R19E

1980' FSL & 1980' FWL

5-1D NESW Sec 1-T10S-R18E

1980' FNL & 660 FWL

7-31B SWNE Sec 31-T9S-R19E

1980' FNL & 1980' FEL

11-31C SWSE Sec 31-T9S-R20E

1980' FSL & 1980' FWL

7-19B SWNW Sec. 19-T9S-R19E

1980' FNL & 1980' FEL

7-30C SWNE Sec. 30-T9S-R20E

1980' FNL & 1980' FEL'

#### Gentlemen:

This letter is to inform you that Permitco is authorized to act as Agent and to sign documents on behalf of PG&E Resources Company when necessary for filing county, state and federal permits including Onshore Order No. 1, Right-of-Way applications, etc., for the above mentioned wells

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations

PG&E Resources Company agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above mentioned wells

Yours very truly,

Drilling Manager

GET/cs

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DRILLING PROGRAM
Page 1

## ONSHORE OIL & GAS ORDER NO. 1 Approval of Operations on Onshore Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

The estimated tops of important geologic markers are as follows:

Formation	Depth	Subsea
Uinta	Surface	<del>,</del>
Green River	665'	
Basal Limestone	50051	- 110'
Wasatch	5113'	- 218'
Chapita Wells 1	5820'	- 925'
Chapita Wells 2	5980'	- 1085'
Chapita Wells 3	ا 6197	- 13021
Chapita Wells 4	6521'	- 1626'
Uteland Buttes	6841'	-\1946'
T.D.	8100'	

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Oil	n/A	
Gas	Wasatch	5113'
Water	N/A	
Other Mineral Zones	N/A	

All fresh water prospectively valuable minerals encountered during drilling, will be recorded by depth and adequately protected. All oil and gas shows will be tested to determine commercial potential.

 PG & E's minimum specifications for pressure control equipment are as follows:



DRILLING PROGRAM

Ram Type: 10" Hydraulic double with annular, 3000 psi w.p.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

As a minimum, the above test shall be performed:

- a. when initially installed;
- b. whenever any seal subject to test pressure is broken
- c. following related repairs; and
- d. at 30-day intervals

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

Annular preventers shall be functionally operated at least weekly.

Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log.

BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed



DRILLING PROGRAM
Page 3

prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The District Office should be notified, with sufficient lead time, in order to have the BIM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 10", 3000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is <u>not</u> to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.
- 4. a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including; presence/absence of hydro\_arbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.
  - Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
  - c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)



DRILLING PROGRAM

- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor coung, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- Surface casing shall have centralizers on every fourth joint of casing starting with the shoe joint and up to the bottom of the cellar.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.
- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- 1. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.



DRILLING PROGRAM Page 6

m.	The proposed casing program will be as follows:					New or	
Purpose Surface	Depth 0-400'	Hole Size	0.D. 9-5/8"	Weight 36#	Grade K-55	Type	Used
Produc.	0-8100'	7-7/8"	5-1/2"	17#	J-55	LTCC	New

- Casing design subject to revision based on geologic conditions n. encountered.
- The cement program will be as follows: o.

Surface	Type and Amount
0-400'	+ 170 sx Class "A" Cement or sufficient volume to circulate to surface.

Production Type and Amount Approx. 600 sx or sufficient to cover zones of interest (from approx. 4800' to T.D.

- Anticipated cement tops will be reported as to depth; not the p. expected number of sacks of cement to be used. The District Office should be notified, with sufficient lead time, in order to have a BIM representative on location while running all casing strings and cementing.
- After cementing but before commencing any test, the casing string q. shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. MOC time shall be recorded in the driller's log.
- r. The following reports shall be filed with the District Manager within 30 days after the work is completed.
  - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
    - Setting of each string of casing, showing the size, a. grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing,



DRILLING PROGRAM

depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.

- b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
- s. Auxiliary equipment to be used is as follows:
  - 1. Kelly cock
  - 2. No bi float is deemed necessary.
  - 3. A sub with a full opening valve.
- 5. a. The proposed circulating mediums to be employed in drilling are as follows:

Interval	Mud Type	Mud Wt.	Visc.	F/L	PH
0-8100'	Water/Gel-KHO	8.4-8.6	N/C	N/	N/C

There will be sufficient mud on location to control a blowout should one occur.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, static filtration loss, and Ph.

- b. Mud monitoring equipment to be used is as follows:
  - Periodic checks will be made each tour of the mud system. The mud level will be checked visually.
- c. No chromate additives will be used in the mud system on Federal and/or Indian lands without prior RIM approval to ensure adequate protection of fresh water aquifers.



DRILLING PROGRAM
Page 8

- 6. The anticipated type and amount of testing, logging and coring are as follows:
  - a. Drill stem tests will be run as warranted after log evaluation. One straddle test is possible in the Green River formation.

If DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of a Dual Laterolog and an FDC-CNL-GR from F.D. to base of surface casing.
- c. No cores are anticipated, however, sidewall cores will be run if warranted.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description,



DRILLING PROGRAM

and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the authorized officer (AO).

- e. The anticipated completion program is as follows: Perforate and casing water frac potential hydrocarbon bearing zones.
- 7. a. The expected bottom hole pressure is 3600 psi.
  - b. No hydrogen sulfide gas is anticipated.
- a. Drilling will commence immediately upon approval of this application.
  - b. It is anticipated that the drilling of this well will take approximately 18-20 days.
  - c. The BLM in Vernal, Utch shall be notified of anticipated date of location construction commencement and of anticipated spud date.
  - e. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.
  - f. The spud date will be reported orally to the NO within 48 hours after spudding. If the spudding occurs on a weekend or holiday, the report will be submitted on the following regular work day. The oral report will be followed up with a Sundry Notice.
  - g. In accordance with Onshore Oil and Gas Order No. 1, this well will be reported on Form 3160-6 "Monthly Report of Operations", starting with the month in which operations commence and continue each month until the well is physically plugged and abandoned. This report will be filed with the Vernal BIM District Office, 170 South 500 East, Vernal, UT 84078.
  - h. <u>Immediate Report:</u> Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.



DRILLING FROCRAM
Page 10

- i. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- j. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- k. Pursuant to NTL-2B, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.
- m. A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3 and 3162.7-4 shall be submitted to the appropriate District Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in 43 CFR 3162.7 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.
- n A first production conference will be scheduled within 15 days after receipt of the first production notice.
- o. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the



#### CONFIDENTIAL - TIGHT HOLE

ONSHORE ORDER NO. 1
PG & E Resources Company
#11-31C Federal
1657' FSL and 2d89' FWL
NE SW Sec. 31, T9S - R20E
Uintah County, Utah

DRILLING PROGRAM
Page 11

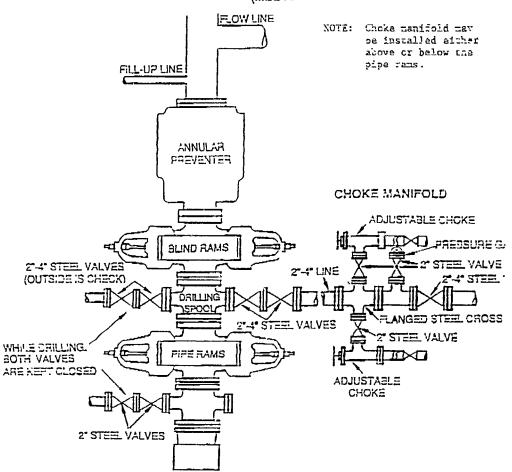
surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative. or the appropriate Surface Managing Agency.

p. Pursuant to Onshore Oil and Gas Order No. 1, lessees and operators have the responsibility to see that their exploration, development, production, and construction operations are conducted in a manner which conforms with applicable Federal laws and regulations and with State and local laws and regulations to the extent that such State and local laws are applicable to operations on Federal or Indian lands.



### FIGURE NO. | THREE PREVENTER HOOKUP CLASS III

(MEETS 43 CFR. PART 3160, 3M SPECIFICA



SURFACE USE FLAN Page 1

#### ONSHORE OIL & GAS ORDER NO. 1

#### Thirteen Point Surface Use Plan

#### Existing Roads

- The proposed well site is located approximately 10 miles southeast of Ouray, Utah.
- b. Directions to the location from Ouray, Utah are as follows:

From Ouray proceed south on the Seep Ridge Road (County Road) for approximately 2.6 miles. Turn right and proceed southwesterly on an existing oilfield road for 3.1 miles to a fork in the road. Turn left and proceed south for 1.6 miles to another fork. Stay right and continue 1.2 miles. Turn left onto new access (flagged) and proceed south and east for 1.4 miles to the location.

- c. For location of access roads within a 2-Mile radius, see Maps A & B.
- d. Improvement to the existing access will not be necessary.
- All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.
- f. Existing roads and newly constructed roads on surface under the purisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

#### 2. Planned 1 ccess Roads

- a. The e will be armoximately 1.4 miles of new access road. The new road will be crowned and ditched with a running surface of 18 feet arm a maximum disturbed width of 30 feet. Appropriate water control will be installed to control erosion.
- b. The maximum grade will be approximately 7%.
- c. No turnouts are planned.







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CNSHCRE CROER NC. 1
PG & B Resources Company
\$11-31C Federal
1657' FSL and 2089' FWL
NW SE Sec. 31, FSS - R2UE
Ulintah Councy, Utah

SURFACS USB PLAN

- b. In rection wells -none
- c. Producing wells none
- d. Erilling wells none
- e. Shur-in wells none
- f. femporarily meandened wells more
- q. Disposal wells none
- h. Cry Boles nore

#### 4. Location of Tank Batteries and Production Facilities.

- a. All permanent structures (consite for six menths or longer) constructed or installed (including cil well pump jacks) will be painted Desert Tan (19786/3). All facilities will be painted within six menths of installation. Facilities required to comply with the Cocupational Safety and Health Act (CSMA) will be excluded. The required caint color is Desert Brown.
- b. If storage facilities, tank bacteries are constructed on this lease, the facility, battery or the wellpad shall surrounded by a containment dike of sufficient capacity to contain at a minimum, the entire content of the largest tank within the facility, battery, unless more stringent protective requirements are deemed necessary by the authorized officer.
- A Sundry Notice will be submitted showing placement of all production facilities prior to construction.
- d. If at any time the facilities located on public land and authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change), BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate iental or other financial obligation as determined by the authorized officer.
- any necessary cits will be properly fenced to prevent any wildlife entry.



SURFACE USE PLAN

- f. All site security guidelines identified in 43 CFR 3162.7 regulations will be adhered to.
- g. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the District Manager.
- h. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- i. The road will be maintained in a safe useable condition.

#### Location and Type of Water Supply

- All water needed for drilling purposes will be obtained from Makin Brine Well, which is located in Section 9, T8S - R20E, Uintah County, Utah.
- b. Water will be hauled to location over the roads marked on Maps A and B.
- c. No water well is to be drilled on this lease.
- d. A copy of the approved water permit is attached.

#### 6. Source of Construction Material

- Surface and subsoil materials in the immediate area will be utilized.
- b. Any gravel used will be obtained from a commercial source.
- c. The use of materials under BIM jurisdiction will conform with 43 CFR 3610.2.3. Construction material will not be located on lease.
- d. No construction materials will be removed from Federal land.



United County, That

SURFACE USE PLAN Page 5

#### 7. Methods of Handling Waste Disposal

- A. The highest pit will be constructed so as not to leak, break, or allow discharge. It will be located on the southeast side of the location.
- b. If a plastic nylon reinforced liner is used, it will be a minimum of 12 mil thickness with sufficient bedding (either stree or dirt) to cover any rocks. The liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. We trash, some pipe, etc., that could puncture the liner will be disposed of in the pit. More stringent protective requirements use to deemed necessary by the L.O.
- 6. Patting will not be allowed. All trash will be contained in a lyash dage and its contents removed of the end of drilling operations and handed to an approved discreas sight.
- is. After first production, produced waste water will be confined to a unitined oil or storage tank for a period not to exceed minety (90) days. During the 90-day period, in accordance with MIT-2B, an Application for approval of a permanent disposal method and bootion, along with the required water analysis, will be submitted for the X's approval. Failure to file an application within the time allowed will be considered an incident of two orange issues.
- Division than the test of contained and burded in the reserve pits.
- Any sales and to change is which are an integral part of the drolling system will be disposed of it the same manner as the drolling (1966).
- io. It chemical posterior by will be furnished with the Arillians can.
- b. The probability will be probable into a test tent until such that he observation of probability facilities is completed. Any applies of oil, was well maked to other produced fluids will be observed to and removed.



SURFACE USE PLAN
Page 6

#### 8. Ancillary Facilities

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

#### 9. Well Site Layout

- a. The reserve pit will be located on the southeast side of the location.
- b. The flare pit will be located downwind of the prevailing wind direction on the southwest side, a minimum of 100 feet from the well head and 30 feet from the reserve pit fence.
- c. The stockpiled topsoil (first six inches) will be stored on the south and west corner.
- d. Access to the wellpad will be from the west as shown on the attached rig layout.
- See Location Layout for orientation of rig, cross section of drill pad and cuts and fills.
- f. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- g. During construction, all brush will be removed from the wellpad and access road and stockpiled separately from the topsoil.
- h. All pits will be fenced according to the following minimum standards:
  - 39 inch net wire shall be used with at least one strand or barbed wire on top of the net wire (barbed wire is not necessary if pipe or some type of reinforcement rod is attached to the top of the entire fence).
  - The net wire shall be no more than 2-inches above the ground. The barbed wire shall be 3-inches above the net wire. Total height of the fence shall be at least 42inches.



SURFACE USE PLAN

- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- 4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
- All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.
- i. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.

#### 10. Plans for Restoration of Surface

#### Producing Location

- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.
- e. The appropriate surface management agency should be contact for required seed mixture.

#### Dry Hole

f. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BIM will



SURFACE USE PLAN

attached the appropriate surface rehabilitation conditions of approval.

#### 11. Surface Ownership

Access Roads - All roads are County maintained or are on Indian or BIM lands.

Wellpad - The well pad is located on lands owned by the BIM.

#### Other Information

- a. A Class III archeological survey was conducted by Sagebrush Archeological Consultants. No significant cultural resources were found and clearance has been recommended. A copy of this report will be submitted directly to the appropriate agencies by Sagebrush Archeological Consultants.
- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places:

-the mutigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

-a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required.



SURFACE USE PLAN Page 9

Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

- c. The operator will control noxicus weeds along rights-of-way for roads, pipelines, well sites, or other applicable facilities. A list of noxicus weeds may be obtained from the BIM, or the appropriate County Extension Office. On BIM administered land it is required that a Pesticide Use Proposal shall be submitted, and given approval, prior to the application of herbicides or other pesticides or possible hazardous chemicals.
- d. Drilling rigs and/or equipment used during drilling operations on this wellsite will not be stacked or stored on Federal Lands after the conclusion of drilling operations or at any other time without BLM authorization. However, if BLM authorization is obtained, it is only a temporary measure.
- e. A silt catchment dam and basin will be constructed according to BIM specifications approximately 2600' west of the location where flagged. A copy of the BIM specifications, "Minimum Standards for Dams Impounding Under 10 Acre Feet" is attached hereto.
- f. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.
- g. A complete copy of the approved APD and ROW grant, if applicable shall be on location during construction of the location and drilling activities.
- h. This permit will be valid for a period of one year from the date of approval. After permit termination, a new application will be filed for approval for any future operations.
- i. The operator or his contractor shall contact the BIM Offices at 801/789-1362 48 hours prior to construction activities.



CNSHORE CRDER NO. 1
PG & E Resources Company
#11-31C Federal
1657' FSL and 2889' FWL
NW SE Sec. 31, T9S - R20E
Uintah County, Utah

SURFACE USE PLAN

- Corner posts shall be cemented and/or braced in such a manner to keep the fence tight at all times.
- 4. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than 16 feet.
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- i. The reserve pit fencing will be on three sides during drilling operations and on the fourth side when the rig moves off the location. Pits will be fenced and maintained until cleanup.

# 10. Plans for Restoration of Surface

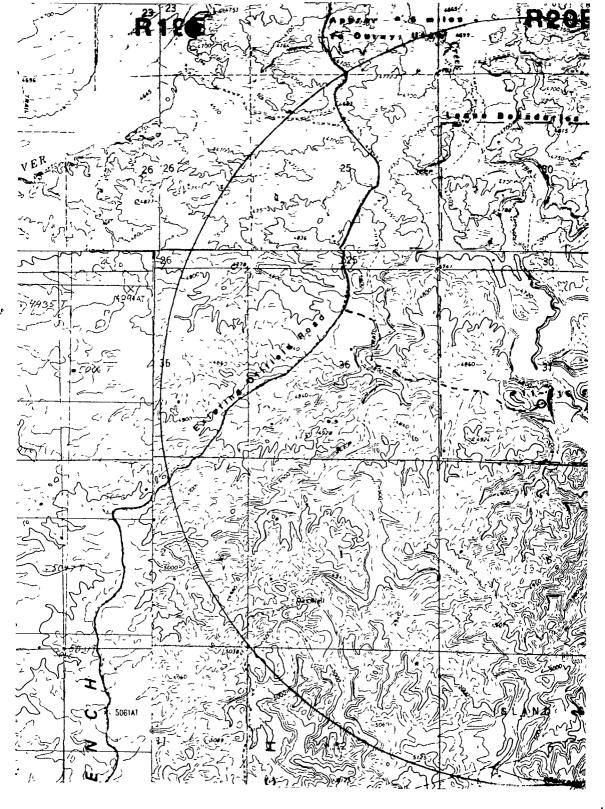
# Producing Location

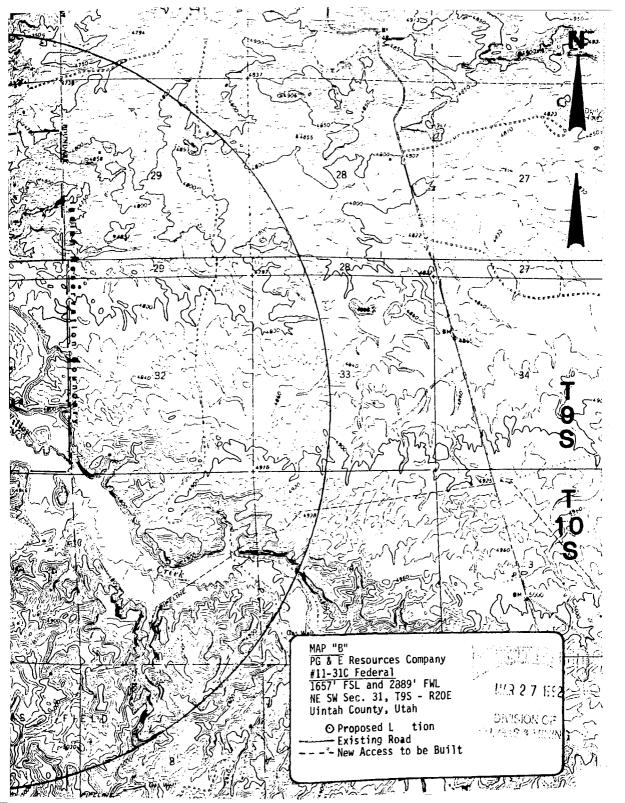
- a. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- b. Immediately upon well completion, any hydrocarbons on the pit shall be removed in accordance with 43 CFR 3162.7-1.
- c. If a plastic nylon reinforced liner is used, it shall be torn and perforated before backfilling of the reserve pit.
- d. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours. The reserve pit will be reclaimed within 90 days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed and all cans, barrels, pipe, etc., will be removed.
- The appropriate surface management agency should be contact for required seed mixture.

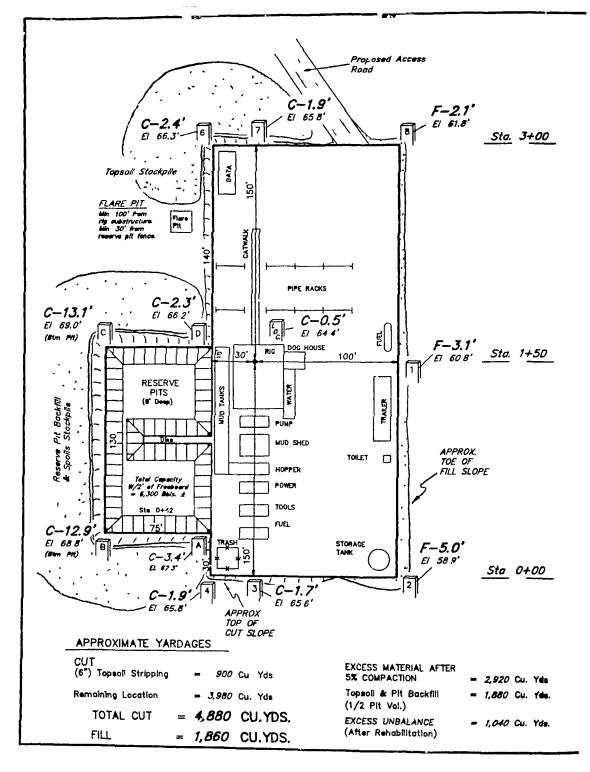
#### Dry Role

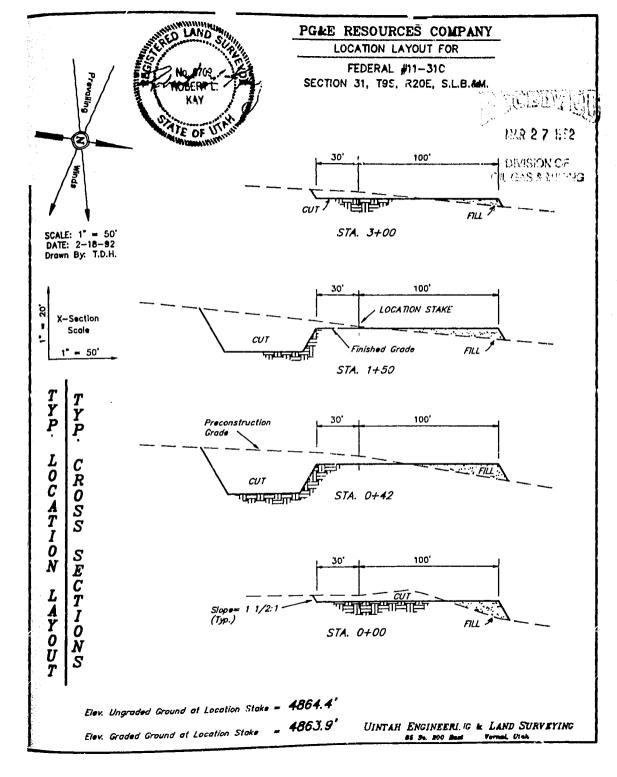
f. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and BIM will











## MINIMUM STANDARDS FOR DAMS IMPOUNDING UNDER 10 AC. FT.

- I. Site Location and Design
  - A. Authorized BLM personnel shall approve site location, fill material, foundation material, and spillway size and location.
  - P. Construction shall be per attached diagram.

#### II. Borrow Areas

- A. Borrow material shall be taken from within the reservoir basin below high water line whenever possible.
- B. Vegetation, debris and topsoil shall be removed to a depth of 12 inches below natural ground line and deposited as directed.
- C. Vegetation, debris and topsoil shall be stockpiled to be used as cover for borrow areas above the high water line or spread on downstream side of dam.
- D. Borrow areas above the high water line shall be contoured to blend into natural ground lines.

#### III. Core Trench and Dam Foundation

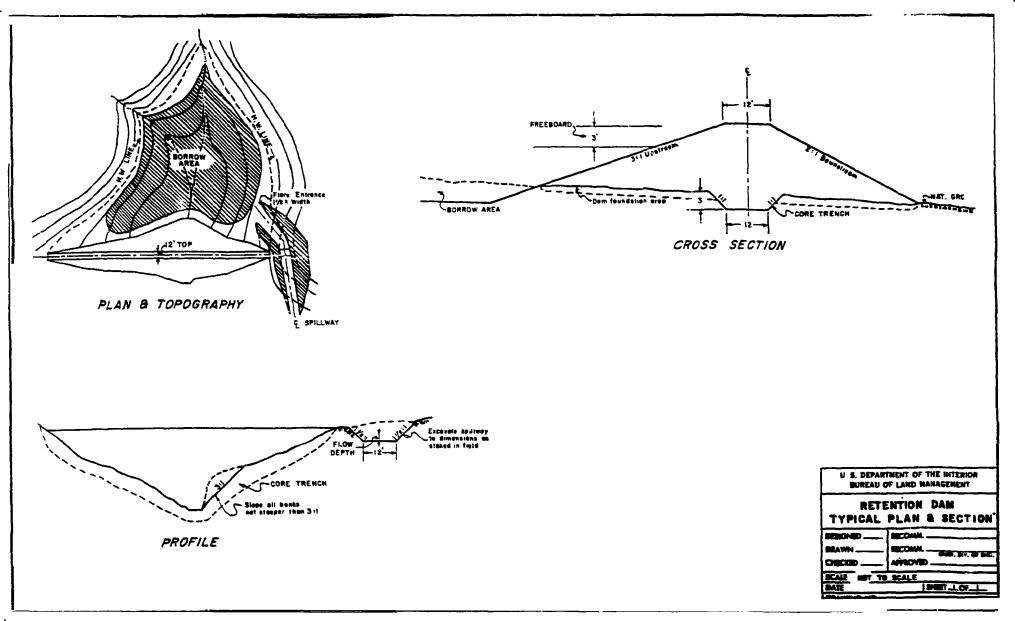
- A. A core trench shall be constructed 12 feet wide along the full length of the dam center line to a minimum depth of 3 feet or bedrock.
- B. Sides of the core trench shall be no steeper than 1:1 slope.

#### IV. Dam and Core Fill

- A. Fill shall be homogeneous material, preferably of high impervious, compactable soils (such as high clay content soil free of organic material, sand or rock).
- B. Lifts of fill shall not exceed 6 inches when compacted.
- C. Fill shall be built up at a consistent rate the full length of the dam.
- D. Lifts shall be compacted by at least one pass of the crawler tractor over the entire width of the lift.
- E. Downstream side of the dam shall be no steeper than 2:1 slope. Upstream side of the dam shall be no steeper than 3:1 slope.
- F. Top of the dam shall be a minimum of 12 feet wide.
- G. Maximum water depth against the dam shall be 10 feet when constructed with a crawler tractor.

## V. Spillway

- A. Spillway shall be constructed through natural material.
- B. Spillway shall be constructed to divert overflow away from fill material or natural material that is an integral part of the dam.
- C. Incorporate in-place rock or hauled-in rock in spillway and at discharge point below spillway to prevent "down cutting" and "blowout" holes, when possible.
- D. Construct spillway so there is a minimum of 3 feet of freeboard on the dam.



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Utah Division of Oil, Gas & Mining 3 Triad Center, Suite 350 Salt Lake City, UT 84180-1203

Attn: Tammi Searing

Re: PG & E Resources Company

#11-31C Federal

1657 FSL and 2889 FWL (Exception Location)
NE SW Sec. 31, T9S - R20E Uintah County, Utah

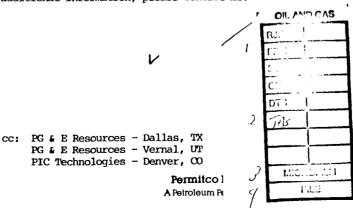
Dear Tammi,

As per our telephone conversation, this letter is to confirm that the above mentioned location has been staked at a non-standard location in accordance with the Rules and Regulations for the Utah Division of Oil Gas and Mining.

This location was staked at these footages based on topography. As you will note from the topographic map which was attached to the A.P.D., we were unable to stake this location at standard footages due to its proximity to Willow Creek.

PG & E Resources Company is the mineral lessee of Federal Lease No. UTU-68631 which includes all of Section 31, T9S - R20E. Therefore, we request administrative approval to this exception location.

Your assistance would be greatly appreciated. If you should need additional information, please contact me.



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HELL NAME	PG: E PLANER		
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CHECK OFF	API NOUSEN	COL	E OF LEASE
	LEASE	FIELD	POTASH OR OTL SHOLE)
PROCESSING COMMENTS:  A other producing staturaler 31.  Water Primit 13-8040 (+90-43-06) with Hazmat  Archeological similar included in file  Oil Shale -arra			
A00900AL	LETTER.	. 1	
SPACING:	R615-2-3	UNIT NA CAUSE NO. & DATE	R515-3-2  R649-3-3  R615-3-3
STIPULATIONS:			
1 -	Oil Shale au	Cl	



# State of Utah DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

355 West North Temple 3 Triad Center Suite 350

Salt Lake City Utah 84180 1203

May 13, 1992

PG & E Resources Company 5950 Berkshire Lane, #600 Dallas, Texas 75225

### Gentlemen<sup>\*</sup>

Re' Federal 11-31C Well, 1657 feet from the south line, 2889 feet from the west line, NE 1/4 SW 1/4, Section 31, Township 9 South, Range 20 East, Uintah County, Utah

Pursuant to Utah Admin R 649-3-3, and Utah Admin R. 649-3-4, approval to drill the referenced well is hereby granted.

In addition, the following specific actions are necessary to fully comply with this approval:

- 1 Compliance with the requirements of Utah Admin R 649-1 et seq, Oil and Gas Conservation General Rules,
- 2 Notification within 24 hours after drilling operations commence.
- Submittal of Entity Action Form, Form 6, within five working days following commencement of drilling operations and whenever a change in operations or interests necessitates an entity status change
- 4. Submittal of the Report of Water Encountered During Drilling, Form 7
- Prompt notification prior to commencing operations, if necessary, to plug and abandon the well Notify Frank R Matthews, Petroleum Engineer, (Office) (801)538-5340, (Home) (801)476-8613, or R J. Firth, Associate Director, (Home) (801)571-6068.
- Compliance with the requirements of Utah Admin. R. 649-3 20, Gas Flaring or Venting, if the well is completed for production

Page 2 PG & E Resources Company Federal 11-31C Well May 13, 1992

Prior to commencement of the proposed drilling operations, plans for facilities for disposal of sanitary wastes at the drill site should be submitted to the local health department. These drilling operations and any subsequent well operations should be conducted in accordance with applicable state and local health department regulations. A list of local health departments and copies of applicable regulations are available from the Department of Environmental Quality, Division of Drinking Water/Sanitation, telephone (801)538-6159.

This approval shall expire one year after date of issuance unless substantial and continuous operation is underway or a request for an extension is made prior to the approval expiration date. The API number assigned to this well is 43-047-32244.

Sincerely.

Associate Director, Oil and Gas

ldc Enclosures

cc. Bureau of Land Management

J.L. Thompson

WOI1

## FEBRUARY 8, 1994

TO: WELL FILE

FROM: K. M. HEBERTSON

RE: Status, Federal 11-31C 43-047-32244 31- 9S-20E

Per telephone conversation with the operator concerning the status of this well, it was determined that the well will not be drilled and the operator has acknowledged that the APD has expired. The operator has been informed that the APD will need to be refiled in order to drill this well at a future date.

As of the above date the APD has been rescinded and the file sent to the LA archives.

KMH